A3  
 And as a backup I will again use my phone, my phone voice memo. And I would like to ask you at this point, could you briefly introduce yourself, what is your background?

I14  
 Exactly, I am an electrical engineer by training. I am not sure how detailed I should start here with you. I always have different versions of introductions, the long one, the short one, the medium one. So, by training an electrical engineer, I studied in XXXXXX, then worked for many years in mining, where I also learned as an electrician. Through my diploma thesis, which I did at an automotive supplier at XXXXX, where the topic was lithium-ion storage, I practically came back into mining, to XX XXXXX XXXXXXXXXX XX XXXXXX, lived in XXXXXX for many years. There I was first a project manager, later sales manager, also active in the mining sector. Because the topic here is AI, I had relatively little to do with that back then and was mainly responsible for pushing our projects forward and for being accountable to the customers regarding the contractual agreements. Then I went back to the roots, to XXXXXXXXXX, again to XXXXXX, to the company XXXXXXXX. There I worked for many years in service, in mining. I was traveling around the world, and quite classically as a service engineer I was also responsible for all the service technicians. I was mainly in China and there I was mostly involved with automation projects, data transmission, etc. Remote maintenance was one of the topics and there were first points of contact with AI or digitalization, I would call it. With augmented reality for example, that you could practically hold a phone onto a component and from a distance draw arrows into the camera image via augmented reality, etc. We already tried to test things like that, but, as I said, the machines at the company XXXXXXXX are operating underground and I have to say, data transmission was very difficult there. It did not work well in that regard. Above ground it was no problem, underground it was difficult. And in that field we also developed data-driven business models. I also wrote a master’s thesis at the same time as an industrial engineer. The topic was the development of digital business models for the machines and through that I also contributed by generating automated reports from machine data and passing them on to customers. Passing them on in the sense of, you pay me per month and then you receive the corresponding report. We pushed this further with a software department, where measures were derived from it as well. And we wanted to push it even further, and actually did so, for example by comparing shifts: which shift performed better, which worse, and why. And then it turned out that one shift operated the machine incorrectly. We could really evaluate everything from the machine data and all of that was visualized through Grafana and provided to customers via the web, via the cloud. And that was basically the most important contact I had with digitalization. Then I stayed with the company XXXXXXXX, but I moved back to XXXXXXX, where my family lives, and worked at XXXXXXXX XXXXXXXXX as head of maintenance. There in XXXXXXXXXXX XXX Dresden the company had a plant, they produced wind turbine gearboxes in series and I was responsible as the classic head of maintenance. We even already installed such a maintenance planning software so that the guys, the maintenance staff, could go to the machines with their phones and, for example, use a camera image to record a malfunction and so on. Many processes were digitalized there. We also aimed to push it further with IoT, equipping the machines with sensors, vibration sensors, etc., so that we could monitor the condition of the machine to the point that we could also make predictions, predictive maintenance so to say, that was where we wanted to go. Unfortunately, the plant was shut down for various reasons and so I ended up here at XXXX, since February, and here it is mainly about using AI, implementing it in different areas, of course also to address the shortage of skilled workers. So I am now here as head of maintenance preparation, that is what it is called here with us, in power plants and mining, and there we ask questions such as how can I automate inspection activities, meaning recurring tasks, for example using drone technology. That is a topic, that we can fly over our PV parks, which we are expanding more and more, with a drone, maybe even autonomously one day, so that you say, you fly over this area once a day, and the images are then AI-supported, analyzed, damages are detected, etc. At the moment we are also working with the company XXXXXXX, they are building a very interesting robot, you should take a look at it, it is really crazy, from Switzerland. It drives around on two wheels, let’s say, has various sensors on board, and I think it could also drive through such a photovoltaic park. It actually comes from the field of corporate security, but if it is already driving through such a photovoltaic park and taking pictures, then of course those pictures can also be used to identify overheated inverter modules, etc., since it also has a thermal imaging camera on board. And these are the contact points I am dealing with at the moment. Document search is another topic, there we are currently working with Google, but in another area, yes, through a prompt input, like with ChatGPT, to try to generate information from the documents we have stored. For example, show me the technical inspection report of plant XY from last year, or how many damages did we have in plant XY last year, in order to access information quickly. That is, as I said, still in its early stages with us, but it is already being experimented with.

A3  
 Okay, all right. Very interesting. You said then that your current role is the head of maintenance preparation.

I14  
 Exactly. Mining power plants here at XXXX.

A3  
 Yes, can you go into a bit more detail about what the specific tasks really are, or are these now really, for example, these projects like document search and the drone flight?

I14  
 Exactly, so I deal with the fundamentals of maintenance, with performance management, that is with contractual matters, value contracts, framework agreements and so on, with the corresponding suppliers, who are managed on a higher level by us, but also with processes. A very big topic for us is process digitalization. And that is where, for example, the document search comes in. Nevertheless, we also have to think about, within processes, certain inspection activities, for example in the field of mining or also, here it is now open-cast mining and underground mining no longer exists here in Germany, or power plants, how to automate certain recurring processes or eliminate or take them over through robotic technology. Exactly, that is basically my portfolio. Documentation is also part of it, right, it is just a separate area for which I am responsible. All the inspection documentation, the operating manuals etc., that all falls under my area.

A3  
 Ok, and yes, in which of these areas do you then really come into contact with AI and in what way, also technically, how does that ultimately apply to you?

I14  
 Exactly, I will start with documentation, this topic of AI document search and so on. That is one thing I already mentioned. And then, of course, it is about these inspection or testing activities, some of which we are also legally obliged to do. Reading pressures, for example, is one such topic. Or ensuring the performance of our plants. That is how I would put it on a higher level, no matter which plant it is. Fire protection is a topic. That is currently an issue with the conveyor belt systems in open-cast mining. In that case, for example, at the moment a man, meaning a human with a car, drives along these conveyor systems. They are kilometers long and in theory that can be done very well with drones. That is one thought. And through processes like that we are considering testing it out. Tests have already been carried out and I am responsible for that.

A3  
 Okay, and for example in the case of the drone, then an AI would be built in that, for example, certain, for example, is it a thermal imaging camera? Exactly, and the AI that would be built in, it would for example, well, what would it do? Identify an object that has become too hot?

I14  
 Exactly. If you imagine such a conveyor system, like a rubber belt that is practically mounted on rollers, and these rollers, there are tens of thousands of them in the conveyor system in open-cast mining, if they are skewed or broken or blocked in some way, then this rubber belt practically rubs over it and as a result, of course, heat is generated through the friction. And it has already happened that such a conveyor system has started to burn, and once it starts burning, it really burns, and we absolutely have to prevent that, of course. So with the thermal imaging camera, at least in theory, we can record the temperatures there or identify any embers, that is the direction it should go, exactly.

A3  
 Okay, but it is still in development. And how do you choose which machine learning model, for example, is deployed in such a drone, that is executed?

I14  
 I would say our know-how does not go that far. So there we are really dependent on external service providers, suppliers or partners with whom we work. We really have no influence on that anymore. Our software know-how does not go that deep.

A3  
 Okay, so that means there is no dedicated development department but rather it is more like consultant work.

I14  
 Exactly, exactly. That is how it is organized with us. Unfortunately, I have to say it was different in the old company. There we always had to rely on the expert knowledge of third parties.

A3  
 Okay, I understand. And is it the same with document search?

I14  
 Exactly. Exactly, we have made different calls for proposals and in the end, that is decided somewhere else again. Of course, we also have an IT department, a very big one. There are indeed computer scientists who deal with the matter, but I would say, in the sense that they practically select the external service provider. And now we are working with the company Google to run corresponding tests in document search.

A3  
 Okay and do you know what such a selection process looks like in your company? Have you ever been able to have a say in it or have you ever been involved?

I14  
 No, as I said, I have only been with XXXX since February. It has not gone that far for me yet. But I know this from the old company. A requirements catalog is created, I would say something like a specification sheet. And that is then practically sent to potential service providers with a request. Here is our requirements catalog. Can you deliver this? And then there are corresponding responses. The most interesting ones we then invite or have invited. They presented what they could fulfill from all these points. They also explained how they would do it. And yes, in the end, of course, the price is extremely important. And then based on that, a decision is made about which provider to take and the whole thing is then put into a functional specification. Also a contract structure so to say, exactly [a bit unclear]. That is basically the normal procedure.

A3  
 And what kind of challenges have you perceived in this process so far? Or what are the difficulties, especially in the selection of AI models? Maybe also for you as a real user of AI models, who does not really implement them but where the AI model is supposed to work in the drone somehow.

I14  
 I would say it does not always go that deep. I have already spoken with one or the other here as part of my work at XXXX. I would say, I personally as XXXXX XXXXXXX do not have the knowledge of which AI model would be more suitable or which would be the best or whatever. I really have the requirement that when the drone flies, it takes a picture and this picture should please, please, please be analyzed as close as possible to 100% and my problems should be detected at 100% which could be a fire, it could be a defect or whatever. There are countless possibilities. That is utopia, but ideally it should be detected or analyzed at 100% by the AI when it goes through all the photos. That is my requirement. I would say what is behind it, how it is done, is not completely irrelevant to me, but I assume that the right model will be selected. That is how deep I am not involved in it.

A3  
 I see, okay, so that means the need to know which model is behind it has not completely disappeared, but ultimately the result counts, that is how one could put it.

I14  
 Definitely the result and as I said, as stupid as it always sounds, but the price of course also always plays a huge role. That is the decisive argument towards the business departments.

A3  
 Okay. Yes, okay. I still find it a very interesting perspective that you have, because you really are ultimately a user of AI models. I would like to show you our first label that we came up with. And that is...

I14  
 I’ll just sit down for a moment

A3  
 I don’t know if you’ve read through our whole website

I14  
 Not completely, but I have seen it.

A3  
 Alright, then the concept will already be a bit familiar to you. I’ll try to make it bigger. And I always forget in the interview which button that is. So, here you should be able to see it. Very good. So, I mean, you already said you do not make this decision between different AI models. But that is exactly what this study is about. There are differences between various AI models that serve the same purpose. And one is often in a situation where you have to decide which one to use. And yes, without priming you any further here and making you biased in some way, what do you see here? And what do you notice about this first label?

I14  
 You already described that on your homepage, I think. It strongly reminds me of the Nutri-Score, clearly, and I do not mean that in a negative way. I immediately see a strong green. That is already positively connoted for me. And yes, I would first need to get my bearings, an AI label, sure, that seems to have something to do with artificial intelligence. I find it very expressive at first glance. It definitely seems to be something good. So a good AI model, if I look into it further. And yes, the rest down there, with those four symbols, I would need to dive deeper into that. But right now I cannot really… oh, Power Draw is milliwatt-seconds, okay. So that is probably the energy consumption, okay, got it. There you would need to have a bit more technical knowledge, of course.

A3  
 Yes, okay. I mean, I can always…

I14  
 Crazy how many decimal places you put there. That is interesting. Is that intentional?

A3  
 That is indeed intentional. I can give a short explanation. It all comes from a study that XXXXXXX did. What he did is, he tested different AI models. In this case it is for image classification. He tested more than 30 of them. Here this would be the AI level of MobileNet V3 Small. That is simply the name of the architecture of this neural network. And he looked at different benchmarks of these various architectures. And from that he created a ranking per metric in the end. What we see here is, as you correctly identified, the energy consumption per inference. Inference in neural networks is basically when an input is turned into an output. So something is calculated. In this case it is an image classification. So, is there a dog or a cat in the picture. Or an ice cream bar or something like that. That is what he compared here. But of course the same can be done with object detection, which might be more interesting for you. For example, is there a hot converter on the thermal camera image or not. Something like that can also be compared. And then he looked at ten metrics in total, so there are even more, and from them a total score is formed. Yes, that is basically the idea. Here you can see what it was tested on, so the graphics card and also the framework and yes, what these metrics mean. So exactly, as I already described. This is really the energy consumption. Then we have the accuracy, so how precise the classification of this network is, how often the right class and the right decision is made. So whether the network says there is a dog in the picture when there really is a dog in the picture. Then we have the running time, so how fast this decision is made in the end. And here the robustness, meaning how attackable this neural network is. That means the images that are given to the network are noised. So small pixel errors are added. And it is tested how robust the decision of the neural network is against these pixel attacks, this pixel noise. And that tells something about how reliable this network is against, for example, image distortions in use. Yes, that is what we had in mind. After this short explanation, does something else come to mind spontaneously about this label? Do you have questions? Any thoughts?

I14  
 So what is important, at least for me, is that the addressees are more the people who deal with this intensively. That is how I see it. I would not count myself among them, I am not a computer scientist either. But if you also want to address people like me, then I would say, I think the consumption part is clear. That is something every ordinary citizen can understand. I also find that very important, especially since sustainability, thankfully, is becoming more and more important in the future. Saving energy, that is clear. I can also understand accuracy. But with corrupted robustness, that is where it ends for me. I have no idea, I cannot make anything of that. So in other words, I wanted to ask or maybe give the hint that it depends on the target group, whether you rather include more overarching, more easily understandable or accessible features. For example, the energy consumption, that is something everyone can relate to. As I said, that would be the only thing that stands out to me or bothers me, because I would need to dive into it more deeply. But if you say right from the start that this is really only for people who have to choose AI on a detailed technical level, then that is fine, because they can make sense of the terms. Apart from that, everything is fine. As an engineer with such decimal places you would chase me out of the room, but I assume or hope you have a good reason for that. For me it would simply be too much, I do not need that many, one would be enough for me if I am honest. Otherwise it actually looks very clear. The most important thing is anyway the ABCDE score, this line here. And apart from that everything fits well. So I can make sense of it.

A3  
 Okay. So the question you raised, who the target group is, is also relatively interesting for us. We already thought about it as being more for developers, so really people who integrate AI models into code. But they do not necessarily have to be AI experts or in fact should explicitly not be AI experts, because this is meant to be a simplified representation of an AI model. Do you, as an actual user of AI models, see a bridge to your work here? For example, how this AI label could be communicated to you by a consultant?

I14  
 I would say, exactly, from that perspective it is of course not bad if it exists. Because I always have to sell myself, also towards, probably just like another company has to, towards the people who in quotation marks give me the money, practically all the finance departments. And of course if I can come around the corner and say, hey, I have this great AI, it costs 100,000 euros, but look, if I take the cheaper one, it has this label, it is only at, let’s say, C, because it consumes much more energy, and you know, if I can build such an argumentation, then that helps me. For example, if I have an AI developer who tells me you absolutely need this one, it was more expensive but we absolutely need the AI with this label, then I can support him. As someone who does not know much about it, I then have more fodder or ammunition, in quotation marks, even if that is a silly word, towards the other departments to whom I have to justify myself, or with whom I have to argue for my decision. That helps me a lot. That is right, yes, yes. Because, as I said, the people who have to listen to me have even less knowledge about the topic. Which brings me back to the symbolism at the bottom. Maybe one should think about switching things or whatever, so that there are more overarching, easier to understand key facts included.

A3  
 Yes, in what direction are you thinking? I mean, you said you can work with three out of the four. That would be robustness which admittedly...

I14  
 Yes, that one actually bothers me the most. The energy consumption I find absolutely great. That is really, really, really important. The accuracy is of course great too. But I ask myself, what exactly is meant by accuracy in the case of AI? I am not so deep into that. If I have an AI that, or let me ask differently, are there AI applications that are specialized only in image analysis? Or can I do all sorts of things with one AI? I need to know, if I am speaking of this AI, ImageNet, which seems to be something with images, with photos, does the top accuracy really only refer to image analysis? Is that correct?

A3  
 Yes, so in this case ImageNet is a huge image database with a thousand different classes. For example dog, cat, mouse, but also popsicle and fruit basket and so on. And these kinds of classes are really only there to learn these classifications and then to do them as correctly as possible. So if we have one thousand classes in ImageNet and we would randomly choose a class each time, then we would have one in a thousand accuracy. And the 63 percent means that in 63 percent of cases what MobileNet outputs as a class, as a result, corresponds to the true class in the image. Right. That is the top one accuracy.

I14  
 Okay, all right. That is interesting. Yes, I am thinking, what other labels are there? I would now look at the label of my fridge. I just mean it should be much more accessible for people who, when it comes to computer science and AI, only ever hear about it in a tabloid newspaper. Let me put it very bluntly. That is what I would focus on. Otherwise, as I said, running time is also clear. It is technical, it does not interest the people who give the money in quotation marks that much. But the most important thing is really consumption. That is really great. As a fourth element I cannot spontaneously think of anything else one could classify. User-friendliness maybe, something like that could also be important. Cyber security, is it vulnerable in any way? Can it still be manipulated or whatever? Can it be easily tricked? But that is already the direction it is going in, tricking. Those kinds of things.

A3  
 Yes, we also thought of this as a way to compare models. That is why I would like to show a second version, or not a version exactly.

A4  
 Could I briefly cut in? Because we have these four symbols down there, but we did not only test four things. I think, how many did we test in total? Ten? I think XXXXXXX tested ten. And among them were things like top five accuracy or model size, for example. So there are more metrics.

A3  
 Exactly, yes, this is just a representative selection of metrics. But yes, we also have number of model parameters. These models are of different sizes, and that also has an impact on how expensive it is to run an inference. But yes, there are definitely more metrics.

I14  
 Alright.

A3  
 Okay, but here again, I already said that MobileNet V3, we just saw it, for the same classification task, so for the same dataset ImageNet, of course there is also EfficientNet B4. I won’t say much more about it. What strikes you right away?

I14  
 I just looked, why is the one now A and C, but you already specified it below with colors, that the battery or rather the consumption is no longer on green but on yellow, so that you can see at a glance, aha, something is not in the green range, so to speak. So that is already, I would even go further, although no, I am not a designer. I think I see the difference quite quickly too, I would even say, and without having to read the values right away, which probably goes faster as well if we have fewer decimal places. I stick with that, but it’s fine, all good.

A3  
 So this “I am not a designer” should not hold you back.

I14  
 Yes, what I wanted to say, for example, you have the battery. If we take that now, you only took a green frame and the white inside of the battery, so to speak, that is quite present for me. I might have filled it in a bit more so that I can see the colors better. Like with Robustness, there I can see it quite well. Or also with the alarm clock, it kind of fades when you only have a green frame on a white background. Maybe that is done differently, but it is a matter of taste, it is

A3  
 Okay, yes, that goes more in the direction of usability.

I14  
 Yes, yes.

A3  
 In UX design. But how would you, in this concrete case, imagine communicating with such cards to funders, maybe to management? How do you interpret this information here? How would you maybe also sell the decisions between these two models?

I14  
 Yes, as I said, that is absolutely right, what you say. For me, if I look at these, what do you call them, four metrics, if I look at the metrics, they only want to know why I choose one and not the other. Then I would not focus on energy consumption. You can of course also scale it up, with so and so many requests, if I now have an AI for such a ChatGPT prompt, how often I enter something and how much energy I save. That always goes in the direction of sustainability. We also have a sustainability officer, and if you give them such things, of course it can be published and marketed well, I would say. That is really the most important information here on this label for me, next to the main score so to speak. And of course, clearly from a technical perspective, an accuracy of 63 percent compared to 20 percent more or almost 20 percent more at 81 percent. That has to be there, I would say. I would not have spent money on the 63 percent. That is very important. The rest, as I said, time savings, yes, that is also not bad, it can drive some people crazy if the request takes longer. But that is secondary at first.

A3  
 And for your use case, I mean really again thermal cameras, object identification, how would you decide here regarding these metrics, especially when it comes to accuracy?

I14  
 I am sorry about the C classification or assessment, but I would have to clearly go with accuracy. Otherwise I would be cutting into my own flesh. That is just the way it is.

A3  
 Because it is safety relevant and

I14  
 What I also see here, which I do not like so much, but I do not know how far apart the differences are. I just noticed again with energy consumption, sometimes you have watt-second, sometimes milliwatt-second. I would somehow try to stay with one unit. Otherwise it is difficult.

A3  
 Okay, yes. How would the sustainability officer in your company see this, or could it maybe lead to conflicts?

I14  
 Yes, certainly. Yes, of course. You always have to weigh things. What costs or what effort, let me put it this way, do I have if I cannot classify four out of ten images correctly, but on the other hand I saved a lot of energy? And how does that calculation look the other way around? You always have to be prepared for such questions. That is how I would put it.

A3  
 But in general, the sustainability of AI models, for example, you just mentioned ChatGPT, every request to ChatGPT or such a prompt also costs electricity. Is that something that is already on the radar of your sustainability officer?

I14  
 No, definitely not. Definitely not.

A3  
 That means it would basically only be applied through the label.

I14  
 Yes, so as I said, the use of AI with us is still relatively in its infancy. I unfortunately have to admit that. And that is why, until it comes into focus, you still have a lot of educational work ahead of you.

A3  
 We will of course continue to try to provide that.

I14  
 To provide. So it is really cool, I will just call it a cool field, a cool market, I was just about to say. So there is still a lot of room for improvement, definitely.

A3  
 Okay, yes, a lot of room for improvement is a good keyword. What would you, what comes to your mind spontaneously, what could still be improved here? Not necessarily on the design level, but you can say that of course as well, but simply, yes, maybe information that you are missing. Is there anything here that you find particularly unhelpful or that maybe even bothers you about these labels?

I14  
 Why do you have two QR codes there?

A3  
 You can actually scan them. One is the QR code for the study that XXXXXXX did, so the paper.

I14  
 Ah, so that will be published at some point then.

A3  
 Yes, correct. And the other one is for, there are, there the models are listed and compared differently again. Ugh, I always forget it. Or maybe it is simply for the website. XXXXXXXXX, do you have it in mind right now? Otherwise I will just scan it quickly.

I14  
 Yes, it is not that dramatic. That would just confuse me more. So it is more about questions like why are there two QR codes on it? And if there is only one, where does it take me? But well, further information.

A4  
 I think that one leads to the paper about the model basically, about this analysis.

A3  
 Yes exactly, I know that one. I think I have only ever scanned one, I must admit.

I14  
 What is of course also not completely uninteresting to know is, I would say, how many models, which models have you already classified, categorized? If you have only classified two here, bluntly said, that would obviously be a bit little, but I do not need to tell you that, you know that yourselves. I do not know if when you scan it you also get that information. That might not be bad to know, but also in general, what your processes look like. So why do you have the right or the authority, I would say, to test the AI models accordingly or how do you test them? So you also have to make sure that the processes that run with you, that practically represent this result here, that they are also in order. But that can really only be answered by the hardcore technologists. That is where I am out, for sure. But that would still be important to me, that somehow a foundation is created. I would say, like an official testing institute, if you issue such a label, it must have some substance, so that one can rely on it. That not just anyone comes around the corner and slaps such a label on, but that it is somehow tied to a higher-level institution, I would say. That would definitely be important to me.

A3  
 At least the first questions you have, what is the comparison study, how much was tested at all, how much was compared, all of that would of course be clarified in the paper that is in the QR code. But you also know scientific papers, you sometimes have to read your way into them, as it is with papers.

I14  
 So of course it is always very reassuring if there is something like, what I just mentioned, as a concrete example, if there is something like a TÜV seal, you know, something people are familiar with, so they know, okay, oh, that is something official and I think that comes across quite well.

A3  
 Yes okay, anything else that you really do not like maybe?

I14  
 No, as I said, I think it is really great that it comes quite close to the Nutri-Score. I think the so-called nerds, no offense, are probably not satisfied with it because it is more for the general public. But I find it quite helpful, really helpful. When you see it, you immediately connect it with a classification into good or bad and the right… Well you have now classified it as good although it has poor accuracy, so one would need to look into that more closely, why exactly is that an A etc., how do you go about that? Regardless of how you arrive at the results, I think it is a good way of presenting it at a glance.

A3  
 Okay, great. We are happy to take that as a compliment.

I14  
 Exactly, that is how it should be.

A3  
 Then the next question would be, what other communication formats have you come across that in some way presented an AI model or a large language model, which is exactly such an AI model, in a similar form? Have you ever come across something like that?

I14  
 No, no. I mean, I have taken part in a seminar before, I even once, but I cannot even tell you anymore what they are called or what they were called, I once tested AI models myself on the very same application, just to see how the results drift apart. But I really cannot tell you anymore what those models were and which one was better and so on. No, I am out.

A3  
 Okay. Yes, we once browsed a bit through the internet and found six different types of representation that exist, which developers of machine learning models often work with. On the one hand there are of course the scientific publications, which we already mentioned. So each of these network types usually has a paper about it, where it somehow originated. In this case it is a paper from a Google team. And yes, as is the case with such a paper, there is of course a lot of text about how it was created, what the benchmarks are. So relatively detailed. Then we have Model Cards. In this case they are from Google. That is a model card also for MobileNet V3. And it lists certain information, for example Image Classification, so the task for which the model is intended. Then what input data it expects, how big it is and then of course again benchmark tests, how fast it is and under which hardware conditions how fast it is. Then we have Papers with Code. I do not know if you know the site. There, if you scroll down, you basically see all the papers that have cited MobileNet V3, so that have used it in some way. So that is also more on the scientific side. Then of course blog posts, things like Medium or Towards Data Science, where it is often written by community journalists about how such a model can be used, what makes the model special. Then the libraries, so from Python with implementation details, meaning what methods, parameters you can give this network. But also benchmarks again. So here too you can see accuracy tests of different networks. And lastly we also have Fact Sheets, in this case from IBM. They also have a lot of information about IBM’s own models, which for example include bias, how biased is the model, how fair is the model. There is also much discussion about discriminatory neural networks.

I14  
 Yes, I have also already, yes.

A3  
 Yes, and at IBM that is actually the case, they have broken it down very strongly, a lot of information. The disadvantage is that it is really only given for IBM’s own networks. Yes, that is what we found on the internet… now my Sciebo crashed, do you still see something?

I14  
 Yes, I see a pointer moving back and forth. But now something again.

A3  
 Now you see something. Okay, that is not what I wanted. I have to… my God, what is… oh, I clicked on some link. Great. That has never happened to me. So, sorry. I will make it big again and I am on the wrong page. There. Okay. So, in comparison. When you now see the six things I just briefly introduced, with this AI label, in the end they want to serve a similar purpose. With nuances they are of course different. What advantages and disadvantages do you see here compared to the AI label?

I14  
 Yes, the first. You are obliged to read deeper into the text. For me, I would say, after ten minutes I already have no desire anymore or do not want to deal with it. Or said differently, I would rather have the option to choose that if I am interested in something, then I read more deeply. But at first glance, at one glance, I would like to have the basic information presented immediately. And that works in an excellent way with the AI label, with such a color scale. That is like night and day, I must admit. I would then, as I said, only like the option to read deeper into the material if I feel like it. Or because of deeper questions from my stakeholders. If I am obliged to. Or also…

A4  
 That will of course be possible, if you then scan the QR code, then… oh, right, you. If you then scan the QR code, you get to the paper and that then describes…

I14  
 Well, I do not know what the question is aiming at now, XXXX. I would say, we do not even need to talk about that. The label takes far less time than dealing with those papers. I would not have the nerve for that.

A3  
 Yes, I also think it is almost a leading question if you direct it at users. I would say, a developer, for example, would of course need to draw more information from a Python documentation for the implementation, which he does not get here with the AI label.

I14  
 What I find cool, when you have those metrics, I think bottom left there was also a table shown, where everything is nicely, I mean, I am an engineer, we love that, tables, where you immediately see side by side what the values are, what performance this AI model has. That is of course really great, but I mean nothing against scientific texts down in the middle. I know that, I have also once been involved with that. Please, please not. Not for industry, that is simply far too much.

A3  
 Another interview partner once mentioned that he could imagine such an interactive clickable label. I can just imagine that, that here for example you click on the power and then a table unfolds for example.

I14  
 Yes, so if you have something like that, yes please, bring it on, that you can click deeper, of course, for God’s sake. I mean I do not want to be redirected to a PDF or an Excel sheet, let us not even talk about that. No, please stay with the label, that makes much, much more sense for normal people.

A3  
 That is what it is partly intended for, after all. Very good, then I would like to return to a topic you briefly touched on earlier. Who should issue such a label? You already mentioned testing institutes, for example TÜV. Would you stick with that, or can you imagine that manufacturers could do it as well?

I14  
 No! Research institutes, that is another keyword, XXXXX or XXXXX or whichever organization is important for AI development. Something official, I believe that enormously increases user trust. I would definitely push for that to be included.

A3  
 Yes, to have it included. Would you also generally say it would be very useful for you if there were something like a general certification?

I14  
 Yes, well, as I said, since I am not involved in the field, if I now saw such a label, I would have to dig deeper, where does it come from? At some point I might end up at the XX XXXXXXXX, and then fine, then I would also have a good feeling, I would say. But I would say, if from the beginning it says somewhere TÜV certified, or I always use TÜV here but it could be something else, then every engineer, every industry professional, I should perhaps say, they can work with that. That probably describes it quite well.

A3  
 If the manufacturer were to do it themselves, similar to the Nutri-Score where I think it is optional whether food companies want to print it or not, how would you feel if that were a manufacturer’s decision?

I14  
 That is ridiculous. Sorry for saying that. I could also test myself, and I can already tell you the result would be excellent. So I do not think that is a good idea. Independent is the keyword. Independent testing. That is not wrong.

A3  
 Alright. Yes, I think most people see it that way. Okay. Then I still have one last question from the interview guide. Would the label need to be adapted to your knowledge background? I mean, you already said adaptability would be important or to have something clickable. Do you see any other way it would need to be adapted to your knowledge background, or maybe also to the background of the managers you would like to show it to?

I14  
 It would be cool if I could also get to use cases through the AI model. That would be cool, because that is what we always promote here. That works best. We like to say we want to work with this or that one, because it has already implemented this or that use case in that company. That leaves the strongest impression.

A3  
 So simply a connection to practice, how you would then use it.

I14  
 Exactly, exactly, exactly. That is always very helpful for the industry.

A3  
 Okay, all right. Thank you very much, you have said many interesting things. XXXXX, did I forget anything?

A4  
 No, I think we covered everything.

I14  
 If not, just reach out again. That is no problem. I am not gone from the world.

A3  
 Okay, otherwise I would say we can stop the recording here.